SEQUENCE LISTING

<110> St. George-Hyslop, Peter H.
Fraser, Paul E.

<120> Proteins Related to Neoronal
Regeneration and Uses Thereof

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His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
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1

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Ser Glu Glu Trp Glu Ala Gln Arg Asp Ser His Leu Gly Pro His Arg
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Ser Thr Pro Glu Ser Arg Ala Ala Val Gln Glu Leu Ser Ser Ser Ile
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Leu Ala Gly Glu Asp Pro Glu Glu Arg Gly Val Lys Leu Gly Leu Gly
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Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala Ser Ala Thr Ala
385   390   395   400
Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Phe Val Ala Ile Leu Ile
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Gly Leu Cys Leu Thr Leu Leu Leu Leu Ala Ile Phe Lys Lys Ala Leu
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Pro Ala Leu Pro Ile Ser Ile Thr Phe Gly Leu Val Phe Tyr Phe Ala
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Cys Ser Gly Val Pro Gly Arg Pro Pro Gly Leu Glu Glu Glu Leu Thr
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Thr Glu Lys Asn Gly Gln Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr
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Pro Ser Val Gly Gln Arg Leu Leu Asn Ser Val Leu Asn Thr Leu Ile
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Pro Ile Ser Ile Thr Phe Gly Leu Ile Phe Tyr Phe Ser Thr Asp Asn
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3

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4

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Pro Gly Leu Asn Thr Ser Asn Gly Asp Gly Ser Glu Thr Glu Thr Thr
        35                  40                  45
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    50                  55                  60
Leu Thr Arg Glu Leu Glu Ala Glu Arg Gln Ile Val Ala Ser Gln Leu
65                  70                  75                  80
Glu Arg Cys Lys Leu Gly Ser Glu Thr Gly Ser Met Ser Ser Met Ser
                85                  90                  95
Ser Ala Glu Glu Gln Phe Gln Trp Gln Ser Gln Asp Gly Gln Lys Asp
            100                 105                 110
Ile Glu Asp Glu Leu Thr Thr Gly Leu Glu Leu Val Asp Ser Cys Ile
            115                 120                 125
Arg Ser Leu Gln Glu Ser Gly Ile Leu Asp Pro Gln Asp Tyr Ser Thr
    130                 135                 140
Gly Glu Arg Pro Ser Leu Leu Ser Gln Ser Ala Leu Gln Leu Asn Ser
145                 150                 155                 160
Lys Pro Glu Gly Ser Phe Gln Tyr Pro Ala Ser Tyr His Ser Asn Gln
                165                 170                 175
Thr Leu Ala Leu Gly Glu Thr Thr Pro Ser Gln Leu Pro Ala Arg Gly
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Thr Gln Ala Arg Ala Thr Gly Gln Ser Phe Ser Gln Gly Thr Thr Ser
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5

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Ser Thr Leu Pro Ala Pro Pro Arg Gly Gly Ser Pro Leu Ala Ala Pro
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Gln Gly Gly Ser Pro Thr Lys Leu Gln Arg Gly Gly Ser Ala Pro Glu
            275             280             285
Gly Ala Thr Tyr Ala Ala Pro Arg Gly Ser Ser Pro Lys Gln Ser Pro
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Ser Arg Leu Ala Lys Ser Tyr Ser Thr Ser Ser Pro Ile Asn Ile Val
305             310             315             320
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Val Gln Ser Thr Ile Ser Ser Ser Pro Ile His Gln Leu Ser Ser Thr
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Ile Gly Thr Tyr Ala Thr Leu Ser Pro Thr Lys Arg Leu Val His Ala
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Ser Glu Gln Tyr Ser Lys His Ser Gln Glu Leu Tyr Ala Thr Ala Thr
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Ser Gln His Gly His Leu Gly Pro Glu Leu Arg Ala Leu Gln Ser Pro
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Glu His His Ile Asp Pro Ile Tyr Glu Asp Arg Val Tyr Gln Lys Pro
            420             425             430
Pro Met Arg Ser Leu Ser Gln Ser Gln Gly Asp Pro Leu Pro Pro Ala
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His Thr Gly Thr Tyr Arg Thr Ser Thr Ala Pro Ser Ser Pro Gly Val
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Ser Asn Tyr Ala Asp Pro Tyr Arg Gln Leu Gln Tyr Cys Pro Ser Val
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6

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Pro His Ser Gly Trp Glu Asn Ser Pro Leu Gln Asp Asp Arg Lys Ile
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7

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His Asn Gln Val Ser Ala Gln Pro Val Pro Gln Glu Pro Ser Arg Lys
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Glu Ser Phe Phe Glu Asp Gln Val His His Arg Pro Pro Ala Ser Glu
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9

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1   5   10   15
Val Pro Asp Gln Pro Pro Ser Ala Ser Glu Lys Asn Ser Ser Leu Ser
                    20   25   30
Pro Gly Leu Asn Thr Ser Asn Gly Asp Gly Ser Glu Thr Glu Thr Thr
            35   40   45
Ser Ala Ile Leu Ala Ser Val Lys Glu Gln Glu Leu Gln Phe Glu Arg
        50   55   60
Leu Thr Arg Glu Leu Glu Ala Glu Arg Gln Ile Val Ala Ser Gln Leu
65   70   75   80
Glu Arg Cys Lys Leu Gly Ser Glu Thr Gly Ser Met Ser Ser Ile Ser
            85   90   95
Ser Ala Gly Glu Gln Phe His Trp Gln Thr Gln Asp Gly Gln Lys Asp
            100   105   110
Ile Glu Asp Glu Leu Thr Thr Gly Leu Glu Leu Val Asp Ser Cys Ile
            115   120   125
Arg Ser Leu Gln Glu Ser Gly Ile Leu Asp Pro Gln Asp Tyr Ser Thr
130   135   140
Ser Glu Arg Pro Ser Leu Leu Ser Gln Ser Ala Leu Gln Leu Asn Ser
145   150   155   160
Lys Pro Glu Gly Ser Phe Gln Tyr Pro Ala Ser Tyr His Ser Asn Gln
                165   170   175
Thr Leu Ala Leu Gly Asp Thr Ala Pro Ser Gln Leu Pro Ala Arg Ser
                180   185   190
Thr Gln Ala Arg Ala Ala Gly Gln Ser Phe Ser Gln Gly Thr Thr Gly
        195   200   205
Arg Ala Gly His Leu Ala Gly Ser Glu Pro Ala Pro Pro Pro Pro Pro
        210   215   220
Pro Arg Glu Pro Phe Ala Pro Ser Leu Gly Ser Ala Phe His Leu Pro
225   230   235   240
Asp Ala Pro Pro Ala Ala Ala Ala Leu Tyr Tyr Ser Ser Ser Thr Leu
                245   250   255
Pro Ala Pro Pro Arg Gly Gly Ser Pro Leu Thr Thr Thr Gln Gly Gly
                260   265   270
Ser Pro Thr Lys Leu Gln Arg Gly Gly Ser Ala Pro Glu Gly Ala Ala
        275   280   285
Tyr Ala Ala Pro Arg Gly Ser Ser Pro Lys Gln Ser Pro Ser Arg Leu
    290   295   300
Ala Lys Ser Tyr Ser Thr Ser Ser Pro Ile Asn Ile Val Val Ser Ser
305   310   315   320

10

Ala Gly Leu Ser Pro Ile Arg Val Thr Ser Pro Pro Thr Val Gln Ser
                325   330   335
Thr Ile Ser Ser Ser Pro Ile His Gln Leu Ser Ser Thr Ile Gly Thr
            340   345   350
Tyr Ala Thr Leu Ser Pro Thr Lys Arg Leu Val His Ala Ser Glu Gln
        355   360   365
Tyr Ser Lys His Ser Gln Glu Leu Tyr Ala Thr Ala Thr Leu Gln Arg
    370   375   380
Pro Gly Ser Leu Ala Ala Gly Ser Arg Ala Ser Tyr Ser Ser Gln His
385   390   395   400
Gly His Leu Ala Pro Glu Leu Arg Ala Leu Gln Ser Pro Glu His His
                405   410   415
Ile Asp Pro Ile Tyr Glu Asp Arg Val Tyr Gln Lys Pro Pro Met Arg
                420   425   430
Ser Leu Ser Gln Ser Gln Gly Asp Pro Leu Pro Pro Ala His Thr Gly
        435   440   445
Thr Phe Arg Thr Ser Thr Ala Pro Ser Ser Pro Gly Val Asp Ser Val
    450   455   460
Pro Leu Gln Arg Thr Gly Ser Gln His Gly Pro Gln Asn Ala Ala Ala
465   470   475   480
Ala Thr Phe Gln Arg Ala Ser Tyr Ala Ala Gly Pro Ala Ser Asn Tyr
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Ala Asp Pro Tyr Arg Gln Leu Gln Tyr Cys Ala Ser Val Asp Ser Pro
                500   505   510
Tyr Ser Lys Ser Gly Pro Ala Leu Pro Pro Glu Gly Thr Leu Ala Arg
            515   520   525
Ser Pro Ser Ile Asp Ser Ile Gln Lys Asp Pro Arg Glu Phe Gly Trp
        530   535   540
Arg Asp Pro Glu Leu Pro Glu Val Ile Gln Met Leu Gln His Gln Phe
545   550   555   560
Pro Ser Val Gln Ser Asn Ala Ala Ala Tyr Leu Gln His Leu Cys Phe
                565   570   575
Gly Asp Asn Lys Ile Lys Ala Glu Ile Arg Arg Gln Gly Gly Ile Gln
            580   585   590
Leu Leu Val Asp Leu Leu Asp His Arg Met Thr Glu Val His Arg Ser
            595   600   605
Ala Cys Gly Ala Leu Arg Asn Leu Val Tyr Gly Lys Ala Asn Asp Asp
    610   615   620
Asn Lys Ile Ala Leu Lys Asn Cys Gly Gly Ile Pro Ala Leu Val Arg
625   630   635   640
Leu Leu Arg Lys Thr Thr Asp Leu Glu Ile Arg Glu Leu Val Thr Gly
                645   650   655
Val Leu Trp Asn Leu Ser Ser Cys Asp Ala Leu Lys Met Pro Ile Ile
                660   665   670
Gln Asp Ala Leu Ala Val Leu Thr Asn Ala Val Ile Ile Pro His Ser
        675   680   685
Gly Trp Glu Asn Ser Pro Leu Gln Asp Asp Arg Lys Ile Gln Leu His
    690   695   700
Ser Ser Gln Val Leu Arg Asn Ala Thr Gly Cys Leu Arg Asn Val Ser
705   710   715   720
Ser Ala Gly Glu Glu Ala Arg Arg Arg Met Arg Glu Cys Asp Gly Leu
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Thr Asp Ala Leu Leu Tyr Val Ile Gln Ser Ala Leu Gly Ser Ser Glu

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Ile Asp Ser Lys Thr Val Glu Asn Cys Val Cys Ile Leu Arg Asn Leu
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Ser Tyr Arg Leu Ala Ala Glu Thr Ser Gln Gly Gln His Met Gly Thr
    770                    775                    780
Asp Glu Leu Asp Gly Leu Leu Cys Gly Glu Thr Asn Gly Lys Asp Thr
785                    790                    795                    800
Glu Ser Ser Gly Cys Trp Gly Lys Lys Lys Lys Lys Lys Ser Gln
            805                    810                    815
Asp Gln Trp Asp Gly Val Gly Pro Leu Pro Asp Cys Ala Glu Pro Pro
            820                    825                    830
Lys Gly Ile Gln Met Leu Trp His Pro Ser Ile Val Lys Pro Tyr Leu
        835                    840                    845
Thr Leu Leu Ser Glu Cys Ser Asn Pro Asp Thr Leu Glu Gly Ala Ala
    850                    855                    860
Gly Ala Leu Gln Asn Leu Ala Ala Gly Ser Trp Lys Gly Trp Ala Glu
865                    870                    875                    880
Asp Val Ala Gly Met Ala Tyr Ala Leu Arg Ser Leu Pro Glu Gly Ala
            885                    890                    895
Pro Cys Leu Pro Gln Trp Ser Val Tyr Ile Arg Ala Ala Val Arg Lys
            900                    905                    910
Glu Lys Gly Leu Pro Ile Leu Val Glu Leu Leu Arg Ile Asp Asn Asp
        915                    920                    925
Arg Val Val Cys Ala Val Ala Thr Ala Leu Arg Asn Met Ala Leu Asp
        930                    935                    940
Val Arg Asn Lys Glu Leu Ile Gly Lys Tyr Ala Met Arg Asp Leu Val
945                    950                    955                    960
His Arg Leu Pro Gly Gly Asn Asn Ser Asn Asn Ser Gly Ser Lys Ala
            965                    970                    975
Met Ser Asp Asp Thr Val Thr Ala Val Cys Cys Thr Leu His Glu Val
            980                    985                    990
Ile Thr Lys Asn Met Glu Asn Ala Lys Ala Leu Arg Asp Ala Gly Gly
        995                    1000                   1005
Ile Glu Lys Leu Val Gly Ile Ser Lys Ser Lys Gly Asp Lys His Ser
    1010                   1015                   1020
Pro Lys Val Val Lys Ala Ala Ser Gln Val Leu Asn Ser Met Trp Gln
1025                   1030                   1035                   104
Tyr Arg Asp Leu Arg Ser Leu Tyr Lys Lys Asp Gly Trp Ser Gln Tyr
            1045                   1050                   1055
His Phe Val Ala Ser Ser Ser Thr Ile Glu Arg Asp Arg Gln Arg Pro
            1060                   1065                   1070
Tyr Ser Ser Ser Arg Thr Pro Ser Ile Ser Pro Val Arg Val Ser Pro
        1075                   1080                   1085
Asn Asn Arg Ser Ala Ser Ala Pro Ala Ser Pro Arg Glu Met Ile Ser
    1090                   1095                   1100
Leu Lys Glu Arg Lys Thr Asp Tyr Glu Ser Ala Gly Asn Asn Ala Thr
1105                   1110·                  1115                   112
Tyr His Gly Thr Lys Gly Glu His Thr Ser Arg Lys Asp Thr Met Thr
            1125                   1130                   1135
Ala Gln Asn Thr Gly Val Ser Thr Leu Tyr Arg Asn Ser Tyr Gly Ala
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Pro Ala Glu Asp Ile Lys Gln Asn Gln Val Ser Thr Gln Pro Val Pro
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12

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Ser Thr Arg Asn Tyr Asp Glu Ser Phe Phe Glu Asp Gln Val His His
1185                1190            1195                120
Arg Pro Pro Ala Ser Glu Tyr Thr Met His Leu Gly Leu Lys Ser Thr
                1205            1210                1215
Gly Asn Tyr Val Asp Phe Tyr Ser Ala Ala Arg Pro Tyr Ser Glu Leu
            1220            1225                1230
Asn Tyr Glu Thr Ser His Tyr Pro Ala Ser Pro Asp Ser Trp Val
        1235            1240            1245
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